Author Index to Volume 20

Abbott, J. R.
—; Miller, D. R.; Netherway, D. J.: Influence of alloy composition on the hardening of Silver–tin dental amalgam, 1391
Abe, K. See Okano, T., 919
Akovali, G. See Hasirci, N., 963
Allen, Jr., B. See Baswell, I. L., 887
Amudeswari, S.
—; Nagarajan, B.; Reddy, C. R.; Joseph, K. T.: Short-term biocompatibility studies of hydrogel-grafted collagen copolymers, 1103
Anderson, J. M. See Marchant, R. E., 37, 153, 799
Angel, D. See Mendes, D. G., 699
Aoyagi, T. See Okano, T., 919
Arends, J. See Schakenraad, J. M., 773
Argentieri, G. J. See Visscher, G. E., 667
Armstrong, R. See McPherson, J. M., 93
Arnander, C.
—; Dryjski, M.; Larsson, R.; Olsson, P.; Swedenborg, J.: Thrombin uptake and inhibition on endothelium and surfaces with a stable heparin coating: A comparative *in vitro* study, 235
Azuma, I. See Nishimura, K., 1359

Bakker, D. See van Blitterswijk, C. A., 1003
Barton, Q. See Powers, D. L., 481
Basmadjian, D.
—; Sefton, M. V.: A model of thrombin inactivation in heparinized and nonheparinized tubes with consequences for thrombus formation, 633
Baswell, I. L.
—; Sander, T.; Allen, Jr., B.; Bechtol, C. O.: Fracture analysis of retrieved orthopedic wires, 887
Baszkin, A. See Deyme, M., 951
Bechtol, C. O. See Baswell, I. L., 887
Behar, D.
—; Juszynski, M.; Ben Hur, N.; Golan, J.; Eldad, A.; Tuchman, Y.; Sterenberg, N.; Rudensky, B.: Omiderm, a new synthetic wound covering: Physical properties and drug permeability studies, 731
Behling, C. A.
—; Spector, M.: Quantitative characterization of cells at the interface of long-term implants of selected polymers, 653
Ben Hur, N. See Behar, D., 731
Berke, J. See Rauch, H. C., 1277
Bernath, F. See Senatore, F., 177, 189
Berry, J. L.
—; Geiger, J. M.; Moran, J. M.; Skraba, J. S.; Greenwald, A. S.: Use of tricalcium phosphate or electrical stimulation to enhance the bone-porous implant interface, 65
Bidez, M. W.
—; Lemons, J. E.; Isenberg, B. P.: Displacements of precious and nonprecious dental bridges utilizing endosseous implants as distal abutments, 785
Biyikli, S.
—; Modest, M. F.; Tarr, R.: Measurements of thermal properties for human femora, 1335
Black, J. See Wapner, K. L., 219
Blanchy, B. G.
—; Coulet, P. R.; Gautheron, D. C.: Immobilization of factor XIII on collagen membranes, 469
Boissonnade, M. M. See Deyme, M., 951
Borenstein, N.
—; Brash, J. L.: Red blood cells deposit membrane components on contacting surfaces, 723
Borzelleca, D. C. See Thacker, J. G., 903
Boss, J. See Mendes, D. G., 699
Brandwein, S. See Doillon, C. J., 1219
Brash, J. L. See Borenstein, N., 723
—; Thibodeau, J. A.: Identification of proteins adsorbed from human plasma to glass bead columns: Plasma-induced degradation of adsorbed fibrinogen, 1263
Brauer, G. M.
—; Steinberger, D. R.; Stansbury, J. W.: Dependence of curing times, peak temperature, and mechanical properties on the composition of bone cement, 839
Browning, A.
—; Chu, C. C.: The effect of annealing treatments on the tensile properties and hydrolytic degradative properties of polyglycolic acid sutures, 613
Brunet, M. E. See Cook, S. D., 1347
Bundy, K. J.
—; Vogelbaum, M. A.; Desai, V. H.: The influence of static stress on the corrosion behavior of 316L stainless steel in Ringer's solution, 493
Burton, S. A.
—; Petersen, R. V.; Dickman, S. N.; Nelson, J. R.: Comparison of *in vitro* bacterial bioluminescence and tissue culture bioassays and *in vivo* tests for evaluating acute toxicity of biomaterials, 827
Busscher, H. J. See Schakenraad, J. M., 773

Castillo, E. J. See Marchant, R. E., 153, 799
Chase, S. E. See Spadaro, J. A., 565
Cheng, C. M. See Horbett, T. A., 739
Chu, C. C. See Browning, A., 613
Cocks, F. H. See Johrde, L. G., 945
Coleman, D.
—; Meuzelaar, H. L. C.; Kessler, T. R.; McClennen, W. H.; Richards, J. M.; Gregonis, D. E.: Retrieval and analysis of a clinical total artificial heart, 417
Coleman, S. E.
—; Hood, C. I.; Schoen, F. J.; Rheinhardt, J. M.: Evaluation of anti-inflammatory agents using a model of granuloma formation evoked by divinyl copolymer beads in the mouse lung, 301
Condell, R. A. See De Lustro, F., 109
Conti, A. See McPherson, J. M., 79
Cook, S. D.
—; Kester, M. A.; Brunet, M. E.; French, H. G.; Haddad, R. J.; Haubold, A. D.: A histologic and mechanical evaluation of carbon-coated polyester suture, 1347
Cook, W.
Alginate dental impression materials: Chemistry, structure, and properties, 1
Cooper, S. L. See Lelah, M. D., 433, 589
Coulet, P. R. See Blanchy, B. G., 469

Daems, W. Th. See Van Blitterswijk, C. A., 989, 1003

D'Amore, P. See Leong, K. W., 51
Dankert, J. See Hogt, A. H., 533
Davidson, J. A. See Georgette, F. S., 1229
de Groot, K. See Van Blitterswijk, C. A., 989
De Lustro, F.
—; Condell, R. A.; Nguyen, M. A.: A comparative study of the biologic and immunologic response to medical devices derived from dermal collagen, 109
Desai, V. H. See Bundy, K. J., 493
Deyme, M.
—; Baszkin, A.; Proust, J. E.; Perez, E.; Boissonnade, M. M.: Collagen at interfaces I. *In situ* collagen adsorption at solution/air and solution/polymer interfaces, 951
Dickman, S. N. See Burton, S. A., 827
Dillingham, E. O. See Marchant, R. E., 37
Doillon, C. J.
—; Whyne, C. F.; Brandwein, S.; Silver, F. H.: Collagen-based wound dressings: Control of the pore structure and morphology, 1219
Dryjski, M. See Arnander, C., 235

Edlich, R. F. See Thacker, J. G., 903
Eldad, A. See Behar, D., 731
Ekstrom, M. E. See Rauch, H. C., 1277
Eyerer, P.
—; Jin, R.: Influence of mixing technique on some properties of PMMA bone cement, 1057

Fairhurst, C. W. See Twiggs, S. W., 293
Feijen, J. See Hogt, A. H., 533
Ferracane, J. L.
—; Greener, E. H.: The effect of resin formulation on the degree of conversion and mechanical properties of dental restorative resins, 121
Ferrans, V. J. See Hilbert, S. L., 1411
Fleming, A. W. See Kram, H. B., 547, 579
Fong, J. W. See Visscher, G. E., 667
French, H. G. See Cook, S. D., 1347
Fujii, N. See Miyama, H., 895
Futami, T. See Kaneko, T., 169

Gaisser, D. M. See Powers, D. L., 481
Gautheron, D. C. See Blanchy, B. G., 469
Geiger, J. M. See Berry, J. L., 65
Gendler, E.
—; Perforated demineralized bone matrix: A new form of osteoinductive biomaterial, 687
Georgette, F. S.
—; Davidson, J. A.: The effect of Hiping on the fatigue and tensile strength of a cast, porous-coated Co-Cr-Mo alloy, 1229
Gleit, J. See Marchant, R. E., 799
Golan, J. See Behar, D., 731
Grasel, T. G. See Lelah, M. D., 433
Greener, E. H. See Ferracane, J. L., 121
Greenwald, A. S. See Berry, J. L., 65
Gregonis, D. E. See Coleman, D., 417
Grote, J. J. See van Blitterswijk, C. A., 989, 1003, 1197

Haddad, R. J. See Cook, S. D., 1347
Hanson, S. R. See Horbett, T. A., 739
Harley, D. P. See Kram, H. B., 547, 579
Hashinger, D. T. See Twiggs, S. W., 293
Hasirci, N.
—; Akovali, G.: Polymer coating for hemoperfusion over activated charcoal, 963

Hassan, R.
—; Vaidyanathan, T. K.; Schulman, A.: Fracture toughness determination of dental amalgams through microindentation, 135
Haubold, A. D. See Cook, S. D., 1347
Hegyeli, A. F. See Jaffe, H., 205, 213
Heimburger, N. See Pelzer, H., 1401
Henricks, M. L. See Powers, D., 143
Hensten-Pettersen, A. See Syrjänen, S., 1111, 1125
Higashi, S. See Kitsugi, T., 1295
Hilbert, S. L.
—; Ferrans, V. J.; Swanson, W. M.: Optical methods for the nondestructive evaluation of couagen morphology in bioprosthetic heart valves, 1411
Hiltner, A. See Marchant, R. E., 153, 799
Hino, S. T. See Kram, H. B., 547, 579
Hodge, J. See Jaffe, H., 205, 213
Hoffman, A. S. See Horbett, T. A., 739
Hogt, A. H.
—; Dankert, J.; Feijen, J.: Adhesion of coagulase-negative staphylococci to methacrylate polymers and copolymers, 533
Horbett, T. A.
Book Review: *Interaction of the Blood with Natural and Artificial Surfaces*, 411
—; Cheng, C. M.; Ratner, B. D.; Hoffman, A. S.; Hanson, S. R.: The kinetics of baboon fibrinogen adsorption to polymers: *In vitro* and *in vivo* studies, 739
Hori, M. See Sato, H., 853
Hood, C. I. See Coleman, S. E., 301
Hunter, J. C. See Thacker, J. G., 903
Hyakuna, K. See Kitsugi, T., 1295

Ichimura, T. See Kaneko, T., 169
Imachi, K. See Iwamoto, R., 507
Imanishi, Y. See Shibuta, R., 971, Ito, Y., 1017, 1139, 1157, See Sanada, T., 1179
Inoue, S. See Maeda, M., 25, Yokoyama, M., 867
Isenberg, B. P. See Bidez, M. W., 785
Ito, S. See Kitsugi, T., 1295
Ito, Y.
—; Sisido, M.; Imanishi, Y.: Synthesis and antithrombogenicity of polyetherurethaneurea containing quaternary ammonium groups in the side chains and of the polymer/heparin complex, 1017
Ito, Y.
—; Sisido, M.; Imanishi, Y.: Adsorption of plasma proteins to the derivatives of polyether-urethaneurea carrying tertiary amino groups in the side chains, 1139
—; Sisido, M.; Imanishi, Y.: Synthesis and anti-thrombogenicity of anionic polyurethanes and heparin-bound polyurethanes, 1157
—; See Sanada, T., 1179
Iusim, M. See Mendes, D. G., 699
Iwamoto, R.
—; Ohta, K.; Matsuda, T.; Imachi, K.: Quantitative surface analysis of Cardiothane 51 by FT-IR-AIR Spectroscopy, 507

Jaffe, H.
—; Wade, C. W. R.; Hegyeli, A. F.; Rice, R. M.; Hodge, J.: Synthesis and bioevaluation of alkyl 2-cyanoacryloyl glycolates as potential soft tissue adhesives, 205
—; Wade, C. W. R.; Hegyeli, A. F.; Rice, R. M.; Hodge, J.: Synthesis and bioevaluation of a rapidly biodegradable tissue adhesive: 1, 2-Isopropylidene glyceryl 2-cyanoacrylate, 213

Jakeman, K. J. See Meryon, S. D., 285
Jin, R. See Eyerer, P., 1057
Johrde, L. G.
—; Cocks, F. H.: Effect of pH on the microhardness of renal calculi., 945
Joseph, G.
—; Sharma, C. P.: Platelet adhesion to surfaces treated with glow discharge and albumin, 677
Joseph, K. T. See Amudeswari, S., 1103
Juszynski, M. See Behar, D., 731

Kakutani, Y. See Kitsugi, T., 1295
Kaneko, T.
—; Nagai, Y.; Ogino, M.; Futami, T.; Ichimura, T.: Acoustoelectric technique for assessing the mechanical state of the dental implant-bone interface, 169
Kataoka, K. See Maeda, M., 25, Yokoyama, M., 867, Yui, N., 929, Okano, T., 919, 1036
Kessler, T. R. See Coleman, D., 417
Kester, M. A. See Cook, S. D., 1347
Kidaka, T. See Sato, H., 853
Kilpikari, J.
—; Lapinsuo, M.; Törmälä, P.; Pätiälä, H.; Rokkanen, P.: Bonding strength of alkyl-2-cyanoacrylates to bone *in vitro*, 1095
Kimura, M. See Maeda, M., 25, Okazaki, M., 879
Kintanar, E. B. See Schoen, F. J., 709
Kitsugi, T.
—; Yamamuro, T.; Nakamura, T.; Higashi, S.; Kakutani, Y.; Hyakuna, K.; Ito, S.; Kokubo, T.; Takagi, M.; Shibuya, T.: Bone bonding behavior of three kinds of apatite containing glass ceramics, 1295
Koerten, H. K. See van Blitterswijk, C. A., 1197
Kokubo, T. See Kitsugi, T., 1295
Kram, H. B.
—; Hino, S. T.; Harley, D. P.; Fleming, A. W.; Shoemaker, W. C.: Use of concentrated fibrinogen in experimental splenic trauma, 547
—; Hino, S. T.; Harley, D. P.; Fleming, A. W.; Shoemaker, W. C.: Use of concentrated fibrinogen in experimental tracheal repair, 579
Kuijpers, W. See van Blitterswijk, C. A., 989, 1197
Kumakura, M.
Mechanical properties of polymeric membranes obtained by radiation cast-polymerization of hydroxyalkyl and hydroxypolyethyleneglycol methacrylate monomers, 521
Kusy, R. P.
—; Whitley, J. Q.: Molecular weight distribution of a bulk ultra-high molecular weight polyethylene product—impax 5M+UHMW–NAT, 1373
Kuwano, A. See Miyama, H., 895

Langer, R. See Leong, K. W., 51
Lapinsuo, M. See Kilpikari, J., 1095
Larsson, R. See Arnander, C., 235
Lee, E. See Schoen, F. J., 709
Ledger, P. W. See McPherson, J. M., 79
Lelah, M. D.
—; Grasel, T. G.; Pierce, J. A.; Cooper, S. L.: *Ex vivo* interactions and surface property relationships of polyetherurethanes, 433
Lemons, J. E. See Wood, S. A., 315, Bidez, M. W., 785
Leong, K. W.
—; D'Amore, P.; Marletta, M.; Langer, R.: Bioerodible polyanhydrides as drug-carrier matrices. II. Biocompatibility and chemical reactivity, 51
Lieberson, S. See Mendes, D. G., 699
Looney, M. A.
—; Park, J. B.: Molecular and mechanical property changes during aging of bone cement *in vitro* and *in vivo*, 555

Maeda, M.
—; Kimura, M.; Inoue, S.; Kataoka, K.; Okano, T.; Sakurai, Y.: Adhesion behavior of rat lymphocyte subpopulations (*B* cell and *T* cell) on the surface of polystyrene/polypeptide graft copolymer, 25
—; See Yokoyama, M., 867
Maniatopoulos, C.
—; Pilliar, R. M.; Smith, D. C.: Threaded versus porous-surfaced designs for implant stabilization in bone-endodontic implant model, 1309
Marchant, R. E.
—; Anderson, J. M.; Dillingham, E. O.; *In vivo* biocompatibility studies. VII. Inflammatory response to polyethylene and to a cytotoxic polyvinylchloride, 37
—; Anderson, J. M.; Castillo, E.; Hiltner, A.: The effects of an enhanced inflammatory reaction on the surface properties of cast Biomer, 153
—; Anderson, J. M.; Hiltner, A.; Castillo, E. J.; Gleit, J.; Ratner, B. D.: The biocompatibility of solution cast and acetone-extracted cast Biomer, 799
Marletta, M. See Leong, K. W., 51
Matsuda, T. See Iwamoto, R., 507
Maulding, H. V. See Visscher, G. E., 667
McClennen, W. H. See Coleman, D., 417
McGregor, W. See Thacker, J. G., 903
McPherson, J. M.
—; Ledger, P. W.; Sawamura, S.; Conti, A.; Wade, S.;Reihanian, H.; Wallace, D. G.: The preparation and physicochemical characterization of an injectable form of reconstituted, glutaraldehyde cross-linked, bovine corium collagen, 79
—; Sawamura, S.; Armstrong, R.: An examination of the biologic response to injectable, glutaraldehyde cross-linked collagen implants, 93
—; See DeLustro, F., 109
Meisner, K. See Senatore, F., 177
Mendes, D. G.
—; Iusim, M.; Angel, D.; Rotem, A.; Mordehovich, D.; Roffman, M.; Lieberson, S.; Boss, J.: Ligament and tendon substitution with composite carbon fiber strands, 699
Meryon, S. D.
—; Jakeman, K. J.: Zinc release from dental restorative materials *in vitro*, 285
Meuzelaar, H. L. C. See Coleman, D., 417
Miller, D. R. See Abbott, J. R., 1391
Miyama, H.
—; Fujii, N.; Kuwano, A.; Nagaoka, S.; Mori, Y.; Noishiki, Y.: Antithrombogenic heparinized polyacrylonitrile copolymer, 895
Miyata, T. See Noishiki, Y., 337
Modest, M. F. See Biyikli, S., 1335
Montgomery, I. N. See Rauch, H. C., 1277
Morena, R. See Twiggs, S. W., 293
Moran, J. M. See Berry, J. L., 65
Mordehovich, D. See Mendes, D. G., 699
Mori, Y. See Miyama, H., 895

Morris, D. M. See Wapner, K. L., 219
Mosher, D. F. See Park, K., 589

Nagai, Y. See Kaneko, T., 169
Nagaoka, S. See Miyama, H., 895
Nagarajan, B. See Amudeswari, S., 1103
Nakahara, T.
—; Yoshida, F.: Mechanical effects on rates of hemolysis, 363
Nakahasi, T. See Yokoyama, M., 867
Nakamura, T. See Kitsugi, T., 1295
Nasu, T.
Polyacrylic acid-metal adhesive bond joint characterization by x-ray photoelectron spectroscopy, 347
Nelson, J. R. See Burton, S. A., 827
Netherway, D. J. See Abbott, J. R., 1391
Nguyen, M. A. See DeLustro, 109
Nilner, K. See Syrjänen, S., 1111, 1125
Nishi, N. See Nishimura, K., 1359
Nishimura, K.
—; Nishimura, S.; Seo, H.; Nishi, N.; Tokura, S.; Azuma, I.: Macrophage activation with multi-porous beads prepared from partially deacetylated chitin, 1359
Nishimura, S. See Nishimura, K., 1359
Nishimura, T. See Yokoyama, M., 867
Noishiki, Y.
—; Miyata, T.: A simple method to heparinize biological materials, 337
—; See Miyama, H., 895

Ogata, N. See Yui, N., 929
Ogino, M. See Kaneko, T., 169
Ohta, K. See Iwamoto, R., 507
Okano, T. See Maeda, M., 25
—; Aoyagi, T.; Kataoka, K.; Abe, K.; Sakurai, Y.; Shimada, M.; Shinohara, I.: Hydrophilic-hydrophobic microdomain surfaces having an ability to suppress platelet aggregation and their *in vitro* antithrombogenicity, 919
—; See Yui, N., 929
—; Uruno, M.; Sugiyama, N.; Shimada, M.; Shinohara, I.; Kataoka, K.; Sakurai, Y.: Suppression of platelet activity on microdomain surfaces of 2-hydroxyethyl methacrylate-polyether block copolymers, 1036
Okazaki, M.
—; Takahashi, J.; Kimura, H.: Crystallinity and solubility behavior of iron-containing fluoridated hydroxyapatites, 879
Olsson, P. See Arnander, C., 235
Ono, K. See Yonenobu, K., 1249
Osol, R. G. See Schoen, F. J., 709

Pal, S. See Saha, S., 817
Parada, F. See Rauch, H. C., 1277
Park, J. B. See Looney, M. A., 555
Park, K.
—; Mosher, D. F.; Cooper, S. L.: Acute surface-induced thrombosis in the canine *ex vivo* model: Importance of protein composition of the initial monolayer and platelet activation, 589
Pätiälа, H. See Kilpikari, J., 1095
Pearson, J. E. See Visscher, G. E., 667
Pelzer, H.
—; Heimburger, N.: Evaluation of the *in vitro* and *ex vivo* blood compatibility of primary reference materials, 1401
Perez, E. See Deyme, M., 951
Petersen, R. V. See Burton, S. A., 827
Pierce, J. A. See Lelah, M. D., 433
Pilliar, R. M. See Maniatopoulos, C., 1309
Pourdeyhimi, B.
—; Wagner, D.: On the correlation between the failure of vascular grafts and their structural and materials properties: A critical analysis, 375
Powers, D. L.
—; Henricks, M. L.; von Recum, A. F.: Percutaneous healing of clinical tympanic membrane implants, 143
—; Gaisser, D. M.; Barton, Q.: Preserved and foreign cartilage interpositional materials for silastic finger joint implant arthroplasty, 481
Proust, J. E. See Deyme, M., 951
Prasad, K. U. See Wood, S. A., 315

Ratner, B. D. See Horbett, T. A., 739, Marchant, R. E., 799
Rauch, H. C.
—; Ekstrom, M. E.; Montgomery, I. N.; Parada, F.; Berke, J.: Histopathologic evaluation following chronic implantation of chromium and steel based metal alloys in the rabbit central nervous system, 1277
Reihanian, H. See McPherson, J. M., 79
Reddy, C. R. See Amudeswari, S., 1103
Rheinhardt, J. M. See Coleman, S. E., 301
Rice, R. M. See Jaffe, H., 205, 213
Richards, J. M. See Coleman, D., 417
Robinson, R. L. See Visscher, G. E., 667
Rodeheaver, G. T. See Thacker, J. G., 903
Roffman, M. See Mendes, D. G., 699
Rokkanen, P. See Kilpikari, J., 1095
Rotem, A. See Mendes, D. G., 699
Rudensky, B. See Behar, D., 731

Saha, S.
—; Pal, S.: Mechanical characterization of commercially made carbon-fiber-reinforced polymethylmethacrylate, 817
Sakurai, Y. See Maeda, M., 25, Yokoyama, M., 867, Okano, T., 919, 1036, Yui, N., 929
Sanada, T.
—; Ito, Y.; Sisido, M.; Imanishi, Y.: Adsorption of plasma proteins to the derivatives of polyaminoetherurethaneurea: The effect of hydrogen-bonding property of the material surface, 1179
Sander, T. See Baswell, I. L., 887
Sanui, K. See Yui, N., 929
Sato, H.
—; Kidaka, T.; Hori, M.: Note: Effect of pore size of porous bead carriers immobilizing antibody on IgE adsorption, 853
Sawamura, S. See McPherson, J. M., 79, 93
Schakenraad, J. M.
—; Busscher, H. J.; Wildevuur, C. R. H.; Arends, J.: The influence of substratum surface free energy on growth and spreading of human fibroblasts in the presence and absence of serum proteins, 773
Schoen, F. J. See Coleman, S. E., 301
—; Kintanar, E. B.; Osol, R. G.; Lee, E.: Pulmonary reaction to intravenously injected polymer beads, 709
Schulman, A. See Hassan, R., 135
Sefton, M. V. See Basmadjian, D., 633

Senatore, F.
—; Bernath, F.; Meisner, K.: Clinical study of urokinase-bound fibrocollagenous tubes, 177
—; Bernath, F.: Lysis time and FDP immunoprecipitation by soluble and immobilized urokinase, 189
Seo, H. See Nishimura, K., 1359
Sharma, C. P. See Joseph, G., 677
Shibuta, R.
—; Tanaka, M.; Sisido, M.; Imanishi, Y.: Synthesis of novel polyaminoetherurethaneureas and development of antithrombogenic material by their chemical modifications, 971
Shibuya, T. See Kitsugi, T., 1295
Shimada, M. See Okano, T., 919, 1036
Shinohara, I. See Okano, T., 919, 1036
Sisido, M. See Shibuta, R., 971, Ito, Y., 1017, 1139, 1157, See Sanada, T., 1179
Shoemaker, W. C. See Kram, H. B., 547, 579
Silver, F. H. See Doillon, C. J., 1219
Skraba, J. S. See Berry, J. L., 65
Smith, D. C. See Maniatopoulos, C., 1309
Spadaro, J. A.
—; Chase, S. E.; Webster, D. A.: Bacterial inhibition by electrical activation of percutaneous silver implants, 565
Spector, M. See Behling, C. A., 653
Stansbury, J. W. See Brauer, G. M., 839
Steinberger, D. R. See Stansbury, J. W., 839
Sterenberg, N. See Behar, D., 731
Sugiyama, N. See Okano, T., 1036
Swanson, W. M. See Hilbert, S. L., 1411
Swedenborg, J. See Arnander, C., 235
Syrjänen, S.
—; Nilner, K.; Hensten-Pettersen, A.: *In vitro* testing of dental materials by means of macrophage cultures. I: Methodological aspects, 1111
—; *In vitro* testing of dental materials by means of macrophage cultures. II: Effects of particulate dental amalgams and their constituent phases on cultured macrophages, 1125

Tada, K. See Yonenobu, K., 1249
Tanaka, M. See Shibuta, R., 971
Takagi, M. See Kitsugi, T., 1295
Takahashi, J. See Okazaki, M., 879
Takaoka, K. See Yonenobu, K., 1249
Tarr, R. See Biyikli, S., 1335
Thacker, J. G.
—; Borzelleca, D. C.; Hunter, J. C.; McGregor, W.; Rodeheaver, G. T.; Edlich, R. F.: Biomechanical analysis of needle holding security, 903
Thibodeau, J. A. See Brash, J. L., 1263
Tokura, S. See Nishimura, K., 1359
Törmälä, P. See Kilpikari, J., 1095
Tsuyuguchi, Y. See Yonenobu, K., 1249
Tuchman, Y. See Behar, D., 731
Twiggs, S. W.
—; Hashinger, D. T.; Morena, R.; Fairhurst, C. W.: Glass transition temperatures of dental porcelains at high heating rates, 293

Urry, D. W. See Wood, S. A., 315
Uruno, M. See Okano, T., 1036

Vaidyanathan, T. K. See Hassan, R., 135
van Blitterswijk, C. A.
—; Grote, J. J.; de Groot, K.; Daems, W. Th.; Kuijpers, W.: The biological performance of calcium phosphate ceramics in an infected implantation site: I. Biological performance of hydroxyapatite during *Staphylococcus aureus* infection, 989
—; Bakker, D.; Grote, J. J.; Daems, W. Th.: The biological performance of calcium phosphate ceramics in an infected implantation site: II. Biological evaluation of hydroxyapatite during short-term infection, 1003
van Blitterswijk, C. A.
—; Grote, J. J.; Koerten, H. K.; Kuijpers, W.: The biological performance of calcium phosphate ceramics in an infected implantation site III: Biological performance of β-whitelockite in the noninfected and infected rat middle ear, 1197
Visscher, G. E.
—; Robinson, R. L.; Maulding, H. V.; Fong, J. W.; Pearson, J. E.; Argentieri, G. J.: Biodegradation of and tissue reaction to poly(DL-Lactide) microcapsules, 667
Vogelbaum, M. A. See Bundy, K. J., 493
von Recum, A. F. See Powers, D., 143

Wade, C. W. R. See Jaffe, H., 205, 213
Wade, S. See McPherson, J. M., 79
Wagner, D. See Pourdeyhimi, B., 375
Wallace, D. G. See McPherson, J. M., 79
Wapner, K. L.
—; Morris, D. M.; Black, J.: Release of corrosion products by F-75 cobalt base alloy in the rat II: Morbidity apparently associated with chromium release *in vivo*: A 120-day rat study, 219
Webster, D. A. See Spadaro, J. A., 565
Whitley, J. Q. See Kusy, R. P., 1373
Whyne, C. F. See Doillon, C. J., 1219
Wildevuur, C. R. H. See Schakenraad, J. M., 773
Wood, S. A.
—; Lemons, J. E.; Prasad, K. U.; Urry, D. W.: *In vitro* calcification and *in vivo* biocompatibility of the crosslinked polypentapeptide of elastin, 315

Yamamuro, T. See Kitsugi, T., 1295
Yokoyama, M.
—; Nakahashi, T.; Nishimura, T.; Maeda, M.; Inoue, S.; Kataoka, K.; Sakurai, Y.: Adhesion behavior of rat lymphocytes to poly(ether)-poly(amino acid) block and graft copolymers, 867
Yonenobu, K.
—; Tada, K.; Takaoka, K.; Tsuyuguchi, Y.; Ono, K.: Elongation of brachymetatarsy with ceramic implant: A roentgenographic evaluation of its utility, 1249
Yoshida, F. See Nakahara, T., 363
Yui, N.
—; Sanui, K.; Ogata, N.; Kataoka, K.; Okana, T.; Sakurai, Y.: Effect of microstructure of poly(propylene-oxide)-segmented polyamides on platelet adhesion, 929

Subject Index to Volume 20

Acoustoelectric, 169
Activated charcoal, 963
Adhesion, 945
Adhesion mechanism, 347
Adhesion of platelets and proteins to polymer surfaces, 589
Adsorption, 739, 963
Adsorption of plasma proteins, 1139, 1179
Aging, 555
Agitation, 363
Alginates, 1
Alkyl 2-cyanoacryloyl glycolate, 205
Alumina ceramics, 1249
Anti-inflammatory agents, 301
Amalgams, 135
Antithrombogenic material, 971
Antithrombogenicity, 337, 1035
Antithrombogenicity of anionic polyurethanes, 1157
Antithrombogenicity of heparin-bound polyurethanes, 1157
Antithrombogenicity of polyetherurethaneurea, 1017
Apatite-containing glass-ceramic, 1295
Artificial skin, 731
Artificial wound covering, 731
ATR Spectroscopy, 507
Autoantibodies, 1277

β-Whitlockite, 1197
Bacterial adhesion, 533
Balloon pump, 507
Biocompatibility, 51, 153, 493, 1111
Biodegradation, 153, 989
Biological material antithrombogenic collagen, 337
Biologic fixation, 65
Biomaterials, 301, 493, 1295
Bioprosthetic heart valves, 1411
Block copolymer, 945
Blood compatibility, 1263
Blood compatibility of polymers, 739
Blood-material interaction, 433, 723
Bone, 687
Bone bonding, 1095
Bone cement, 555, 839, 1057
Bone implant, 169
Brachymetatarsy, 1249
Bubbling, 363

Cage implant system, 37, 153, 799
Calcium phosphate ceramics, 1003, 1197
Carbon fibres, 699
Carbon fibre composite unit, 699
Carbon-fiber-reinforced polymethylmethacrylate, 817
Cardiothane, 51, 507
Cartilage, 687
Cartilage graft, 481
Cell, 723
Cell culture, 1111, 1125
Cell separation, 25
Cellular biocompatibility, 37
Central nervous system, 1277
Ceramic implant, 1249
Chain transfer agent, 839
Chemical state analysis, 347
Chemistry, 1
Chromium-cobalt-molybdenum, 219
Coating, 963
Co-Cr-Mo Alloy and porosity, 1229
Collagen, 79, 93, 109, 469, 951, 1411
Collagenase, 79, 93
Collagen dispersion, 1219
Collagen sponge, 1219
Compatibility, 1249
Competitive and sequential protein adsorption, 589
Compliance optimization, 375
Compression, 261
Concentration, 285
Contact angles, 533
Controlled delivery, 51
Corrosion, 493
Cr (III), 219
Cr (VI), 219
Creep, 261
Cross-linked Polypentapeptide (XPPP), 315
Cyanoacrylate, 1095
Cytotoxicity, 285

Deacetylated chitin (DAC), 1359
Degradation of adsorbed fibrinogen, 1263
Degree of cure, 121
Dental alloy, 347
Dental amalgam alloys, 1391
Dental composites, 121
Dental impression materials, 1
Dentin, 285
Dental amalgam, 1111
Dental materials, 1125
Dental porcelain, 293
Dental porcelain properties, 293
Dental porcelain viscosity, 293
Derivatives of polyaminoetherurethaneurea, 1179
Dermal collagen, 109
Design of textile structures, 375
Detaching test, 1295
Dialdehydestarch, 247
Dimensional change, 1391
p-(Dimethylamino)phenethanol accelerator, 839
Di-*tert*-butyl-*p*-cresol inhibitor, 839
Divinylbenzene copolymer beads, 301, 709
Dressing, 1219
Drug-carrier, 1359

E. cuniculi, 1277
Electrical current, 565
Electron-metallography, 1391
Electrical stimulation, 65
(EPM) Electron probe microanlysis, 315
EPR (Electron paramagnetic resonance), 555
Endodontic implants, 1309
Endothelium, 235
Environmental effects, 261
Extracorporeal shunt, 177

F-75, 219
Factor XIII, 469

Failure modes of vascular grafts, 375
Fatigue, 1229
Fibrinogen, 739
Fibrin adhesive, 547, 579
Fibrin degradation product (FDP), 177, 189
Fibrinogen adsorption, 1401
Finger joint implant, 481
Flexure, 261
Fractionation, 1373
Fracture, 135
Free radical, 555
FT-IR Spectroscopy, 507

Glass beads, 853
Glass-to-metal seals, 293
Glass transition temperature, 293
Glutaraldehyde cross-linking, 79, 93, 109
Graft copolymer, 25, 945
Granuloma, 301, 653

Hexamethyldisiloxane, 963
Hematoxylin and Eosin (H&E), 315
Hemolysis, 363
Hemostasis, 547
Heparin, 235
Heparinization, 337
HIPing, 1229
Histology, 1347
Hydrogel-grafted collagen copolymers, 1103
Hydrophilic-hydrophobic microdomain surfaces, 919
Hydroxyapatite, 989, 1003
2-Hydroxyethyl Methacrylate-Polyether block copolymer, 1035
Hydroxylapatite (HAP), 315
Human femora, 1335

IgE, 853
Immobilization, 853
Immobilization techniques, 469
Immunoadsorbent, 853
Immunochemical methods, 1401
Immuno-gold bead staining of adsorbed protein molecules, 589
Incubation period, 285
Infection, 565
Inflammation, 37, 153
Inflammatory response, 799
Injectable collagen, 79, 93
Injected polymer beads, 709
Interfacial rigidity, 169
In situ collagen adsorption, 951
In vitro, 739
In vitro antithrombogenicity, 919
In vitro bacterial bioluminescence, 827
In vitro/ex vivo test, 1401
In vitro toxicity, 205, 213
In vivo, 739
In vivo toxicity, 205, 213
1,2-Isopropylidene glyceryl 2-cyanoacrylate, 213

Leukocyte interactions with polymers, 799
Lithium Fluoride (LiF), 315
316L Stainless Steel, 493
Lung, 301
Lymphocyte, 945
Lymphocyte subpopulation, 25
Lysis time, 189

Macrophages, 653
Macrophage activation, 1359
Matrix, 687
Mechanical factors, 363
Mechanical properties, 121
Mechanical testing, 1347
Mega radiation absorbed dose (MRAD), 315
Membrane-surface deposits, 723
Mesenchymal cells, 687
Metal implants, 1277
Methacrylate (co)polymers, 533
Microdomain structure, 1035
Microphase separation, 25
Microstructures, 1391
Mixing technique, 1057
Molecular weight (MW), 315
Molecular weight distribution, 1373
Multiporous beads, 1359
Methacrylate polymers, 261

NMR, 205
Nonthrombogenic surfaces, 235

Omiderm, 731
Osteoinduction, 687
Osteotomy, 1335

Partially crosslinked on whole canine blood (PXLWCB), 189
Patency, 177
Percutaneous, 143
Percutaneous implants, 565
Permanent set, 1
Permeability of topical agents, 731
Phagocytosis, 1125
Plasma polymerization, 963
Plasma protein adsorption, 1263
α_2 Plasmin inhibitor (α_2 PI), 189
Platelet activation, 1401
Platelet adhesion, 1035
Platelet adsorption, 1401
Platelet spreading and thrombus formation, 589
Polarized Light Microscopy, 1411
Polyacrylic acid, 347
Poly(amino acid), 945
Polyelectrolytes, 1
Polyetherurethane, 153, 799
Polyetherurethaneurea derivatives, 1139
Polyethylene, 37, 653, 1373
Polymerillheparin complex, 1017
Polymeric biomaterial, 433
Polymerization exotherm, 839
Polymethylmethacrylate, 555, 1057
Polypentapeptide (PPP), 315
Poly(propylene-oxide)-segmented polyamides, 929
Polysulfone, 653
Polyurethane, 433
Polyurethane radiopaque marker, 273
Polyvinylchloride, 37
Polyanhydrides, 51
Pore size, 853
Porosity of bone cements, 1057
Porous coatings, 1229
Porous implants, 65
Porous structure, 1219
Porous-surfaced implants, 1309
Porcine urether vascular substitute, 337
Pressure fluctuation, 363
IL-1 Production, 1359

Quantitative Surface Analysis, 507

Radiological evaluation, 1249
Rapidly biodegradable, 213
Rat middle ear, 989
Reactivity, 51
Red blood cells, 723
Renal calculi, 945
Resins, 121
Rheology, 1

SA/BW, 219
Scanning Electron Microscopy (SEM), 177, 247, 315
Shear, 363
Silicone, 481
Silver, 565
Silver-tin alloys, 1391
Splenic salvage, 547
Splenic trauma, 547
Staphylococcus aureus, 989
Sterilization by γ or β irradiation, 469
Stress, 493
Structure, 1
Structure-property relationships, 375
Surface, 247
Surface analysis, 433
Surface characterization, 799
Surface-treated dialdehydestarch with albumin or gelatin, 247
Sustained release, 51
Suture, 1347
Synthesis of anionic polyurethanes, 1157
Synthesis of heparin-bound polyurethanes, 1157
Synthesis of novel polyaminoether-urethaneureas, 971
Synthesis of polyetherurethaneurea, 1017
Synthetic clot, 189
Synthetic ligament, 699
Synthetic Polypeptide, 25

Tear, 1
Tendon substitute, 699
Tensile testing, 1095
Tetra(3-mercaptopropionate) pentaerythritol, 839
Thermal properties, 1335
Threaded implants, 1309
Thrombin, 235
Thromboembolization, 589
Tissue adhesive, 205, 213
Tissue culture bioassays, 827
Tissue ingrowth, 65, 1309
Tissue remodelling, 1309
Titanium, 143
Toughness, 135
Toxicity screen, 37
Toxicology, 51
Tracheal anastomosis, 579
Tracheal stenosis, 579
Tracheal surgery, 579
Transamidase, 469
Tricalcium Phosphate, 65
Turbulence, 363
Tympanic membrane, 143

ULTI Carbon, 1347
Ultra-high molecular weight polyethylene, 1373
Urea-reactive chemisorbent, 247
Urokinase-Bound Fibrocollagenous Tube (UK-FCT), 177

Vascular graft, 433
Vibration, 169
Viscometry, 1373

Whitlockite-containing glass-ceramic, 1295
Wollastonite-containing glass-ceramic, 1295
Wound healing, 547, 579, 653
Weibull statistics, 375

X-ray photoelectron spectroscopy, 347
Zeta-potentials, 533